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College of Business and
Economic Development

Information Technology (Developer) BS Degree Requirements (124 hours)



Degree Plan (IFTDEVBS)

General Education Curriculum

GEC 01. Written Communication (6 hours)

- [ENG 101 - Composition One](#) 3 hrs.
- [ENG 102 - Composition Two](#) 3 hrs.

GEC 02. Natural Science (8-10 hours minimum)

Select 2 courses with labs:

- [AST 111 - General Astronomy I](#) 3 hrs. AND
- [AST 111L - General Astronomy I Laboratory](#) 1 hr.
- [AST 112 - General Astronomy II](#) 3 hrs. AND
- [AST 112L - General Astronomy II Laboratory](#) 1 hr.
- [BSC 103 - Biology and Society](#) 3 hrs. AND
- [BSC 103L - Biology and Society Laboratory](#) 1 hr.
- [BSC 110 - Principles of Biological Science I](#) 3 hrs. AND
- [BSC 110L - Principles of Biological Science I Laboratory](#) 1 hr.
- [BSC 111 - Principles of Biological Science II](#) 3 hrs. AND
- [BSC 111L - Principles of Biological Science II Laboratory](#) 1 hr.
- [BSC 250 - Human Anatomy and Physiology I](#) 3 hrs. AND
- [BSC 250L - Human Anatomy and Physiology I Laboratory](#) 1 hr.

Schools and Programs
College of Education and Human Sciences
College of Education and Human Sciences Schools and Programs
College of Nursing and Health Professions
College of Nursing and Health Professions Schools and Programs
Center for International Education
Honors College
C2C University Studies
University of Southern Mississippi Gulf Coast
Course Descriptions

- [BSC 251 - Human Anatomy and Physiology II](#) 3 hrs. AND
 - [BSC 251L - Human Anatomy and Physiology II Laboratory](#) 1 hr.
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- [CHE 104 - Chemistry and Our Environment](#) 3 hrs. AND
 - [CHE 104L - Chemistry and Our Environment Laboratory](#) 1 hr.
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- [CHE 106 - General Chemistry I](#) 3 hrs. AND
 - [CHE 106L - General Chemistry I Laboratory](#) 1 hr.
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- [GHY 104 - Weather and Climate](#) 3 hrs. AND
 - [GHY 104L - Weather and Climate Laboratory](#) 1 hr.
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- [GHY 105 - Land and Water](#) 3 hrs. AND
 - [GHY 105L - Land and Water Lab](#) 1 hr.
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- [GLY 101 - Physical Geology](#) 3 hrs. AND
 - [GLY 101L - Physical Geology Laboratory](#) 1 hr.
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- [GLY 103 - Historical Geology](#) 3 hrs. AND
 - [GLY 103L - Historical Geology Laboratory](#) 1 hr.
-
- [MAR 151 - Introduction to Ocean Science](#) 3 hrs. AND
 - [MAR 151L - Introduction to Ocean Science Laboratory](#) 1 hr.
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- [PHY 103 - Introductory Physics](#) 3 hrs. AND
 - [PHY 103L - Introductory Physics Laboratory](#) 1 hr.
-
- [PHY 111 - General Physics I](#) 3 hrs. AND
 - [PHY 111L - General Physics I Laboratory](#) 1 hr.
-
- [PHY 112 - General Physics II](#) 3 hrs. AND
 - [PHY 112L - General Physics II Laboratory](#) 1 hr.
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- [PHY 201 - General Physics I with Calculus](#) 4 hrs. AND
 - [PHY 201L - General Physics I with Calculus Laboratory](#) 1 hr.
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- [PHY 202 - General Physics II with Calculus](#) 4 hrs. AND
 - [PHY 202L - General Physics II with Calculus Laboratory](#) 1 hr.
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- [PSC 190 - Living in a Material World](#) 3 hrs. AND
 - [PSC 190L - Lab for Living in a Material World](#) 1 hr.

GEC 03. Humanities (9 hours)

-
- [ENG 203 - World Literature](#) 3 hrs.

Select 2 courses, 1 History required:

-
- [HIS 101 - World Civilizations: Beginnings to 1500 C.E.](#) 3 hrs.
 - [HIS 102 - World Civilizations: 1500 to the present](#) 3 hrs.
 - [PHI 151 - Introduction to Philosophy](#) 3 hrs.
 - [PHI 171 - Ethics and Good Living](#) 3 hrs.
 - [REL 131 - Comparative Religion](#) 3 hrs.

GEC 04. Aesthetic Values (3 hours)

Select 1 course:

- ART 130 - Art Appreciation 3 hrs.
- DAN 130 - Dance Appreciation 3 hrs.
- MUS 165 - The Enjoyment of Music 3 hrs.
- THE 100 - Theatrical Expressions 3 hrs.

GEC 05. Social and Behavioral Sciences (6 hours)

Select 2 courses:

- ANT 101 - The Human Experience: A Global Perspective on Human Diversity 3 hrs.
- HHS 100 - Concepts of Wellness 3 hrs.
- ECO 101 - Basic Economics 3 hrs.
- GHY 101 - World Geography: Dynamics of a Changing Earth 3 hrs.
- PS 101 - American Government 3 hrs.
- PSY 110 - General Psychology 3 hrs.
- SOC 101 - Understanding Society: Principles of Sociology 3 hrs.

GEC 06. Mathematics (3 hours)

Select 1 course:

- MAT 100 - Quantitative Reasoning 3 hrs.
- MAT 101 - College Algebra 3 hrs.
- Higher-level MAT course*

GEC 07. Writing-Intensive Requirement (Major Area)

- CSC 309 - Computers and Society 3 hrs. (WI)
ENG 101 & ENG 102 prerequisites

GEC 08. Speaking Intensive Requirement (3 hours)

Select 1 course:

- CMS 111 - Public Speaking 3 hrs. (SI)
- CMS 305 - Interpersonal Communication 3 hrs. (SI)
- CMS 320 - Professional Communication 3 hrs. (SI)
- CMS 330 - Small-Group Communication 3 hrs. (SI)

GEC 09. Capstone Requirement (Major Area)

- ITC 400 - Senior Project 1-3 hrs. (Capstone)
Must be taken Senior Year; ENG 101 & ENG 102 prerequisites

Note:

*This course satisfies both the GEC requirement and a program requirement for this major.

**This particular GEC course is recommended by this major.

***This course does not satisfy prerequisites for any other math course.

GEC 07 - GEC 09 courses are specific to this major.

For full description of the GEC, see [here](#).

DEG 01. Major Area of Study Requirements (68 hours)

[CSC 101 - Computer Science I](#) AND

CSC 101 - Computer Science I



3 hrs.

Corequisite(s): [CSC 101L](#). Problem-solving, algorithm development, computer programming, overview of computer science.

[CSC 101L - Computer Science I Laboratory](#)

CSC 101L - Computer Science I Laboratory



1 hr.

Corequisite(s): [CSC 101](#).

[CSC 102 - Computer Science II](#)

CSC 102 - Computer Science II



4 hrs.

Prerequisite(s): [CSC 101](#), [CSC 101L](#). Continuation of [CSC 101](#) with emphasis on programming style and algorithm analysis.

[CSC 309 - Computers and Society](#) (SI/WI)

CSC 309 - Computers and Society



3 hrs.

Prerequisite(s): [ENG 102](#). Ethical issues for technical professionals, social impact of professional and entrepreneurial activity, the social impact of computer technology; speaking intensive. Writing-intensive

[CSS 331 - Visual Basic](#)

CSS 331 - Visual Basic



3 hrs.

Prerequisite(s): [CSC 101](#) or [CSS 240](#) or [CSS 333](#). Designing and writing VB program, object-oriented design, event-driven programming, object linking, embedding and prototyping, CAD and equipment interface.

[CSS 346 - Introduction to Java](#)

CSS 346 - Introduction to Java



3 hrs.

Prerequisite(s): [CSC 102](#) or [CSS 334](#). Comprehensive coverage of the Java programming language and environment. Java basics, object-oriented programming and graphical user interface design; collection of Java introductory topics.

[CSS 431 - Advanced Visual Basic](#)

CSS 431 - Advanced Visual Basic



3 hrs.

Prerequisite(s): [CSS 331](#). OO terminology and applications, object linking and embedding, word-processing and spreadsheet concepts, RDBMS, SOL, introduction to the Internet, VB objects on the Internet, VB programming on the Internet.

[CSS 446 - Advanced Java](#)

CSS 446 - Advanced Java



3 hrs.

Prerequisite(s): [CSC 346](#). This course is designed to prepare the student with the skills and techniques needed to rapidly develop and deploy sophisticated client-server Java applications; covers a collection of advanced Java topics.

[ITC 102 - Systems Architecture](#)

AND

ITC 102 - Systems Architecture



2 hrs.

Corequisite(s): [ITC 102L](#). Microcomputer hardware and architecture lecture and research.

- [ITC 102L - Systems Architecture Laboratory](#) 1 hr.

[ITC 103 - Information Technology Fundamentals](#)

AND

ITC 103 - Information Technology Fundamentals



2 hrs.

Corequisite(s): [ITC 103L](#). Information Technology Fundamentals will cover a broad scope of IT related areas to include desktop operating system, office applications, troubleshooting, basic scripting and web page and graphic design.

- [ITC 103L - Information Technology Fundamentals Lab](#) 1 hr.
- [ITC 131 - Internetworking Technologies](#) 2 hrs. AND
- [ITC 131L - Internetworking Technologies Laboratory](#) 1 hr.

[ITC 132 - Introduction to Routers](#)

AND

ITC 132 - Introduction to Routers



2 hrs.

Prerequisite(s): [ITC 131](#). Corequisite(s): [ITC 132L](#). An examination of router architecture, configuration and management using a popular IOS with an emphasis on wide-area networks.

- [ITC 132L - Introduction to Routers Laboratory](#) 1 hr.

[ITC 171 - Linux Fundamentals](#) AND

ITC 171 - Linux Fundamentals



2 hrs.

Prerequisite(s): [ITC 102](#). Corequisite(s): [ITC 171L](#). Introduction to Linux operating system and its use in current information technology.

- [ITC 171L - Linux Fundamentals Laboratory](#) 1 hr.
- [ITC 241 - Information Assurance and Security](#) 3 hrs.
- [ITC 242 - Network Security](#) 3 hrs.
- [ITC 261 - Dynamic Web Application Development](#) 3 hrs.
- [ITC 283 - Client Installation and Administration](#) 3 hrs.
- [ITC 285 - Server Administration](#) 3 hrs.
- [ITC 361 - Human Computer Interaction](#) 3 hrs.
- [ITC 371 - Information Technology Project Management](#) 3 hrs.
- [ITC 400 - Senior Project](#) 1-3 hrs. (Capstone)

Select 1 course:

[ITC 492 - Special Problems](#) or

ITC 492 - Special Problems



1-3 hrs.

[ITC 496 - Industrial Internship](#)

ITC 496 - Industrial Internship



1-6 hrs.

A minimum of 400 total hours of internship under the direct supervision of industrial professionals in collaboration with Southern Miss faculty.

Select 1 course:

- [CSC 300 - Foundations of Computer Science](#) 3 hrs. or

[ITC 350 - SQL Techniques for Applications](#)

ITC 350 - SQL Techniques for Applications



3 hrs.

Prerequisite(s): [CSC 102](#) or permission of instructor. SQL, Create, Select, Insert, Update, Delete, nested queries, query summaries, transactions, locks, trigger, stored procedures.

DEG 02. Additional Requirements (15 hours)

- [CSC 307 - Data Structures and Algorithm Analysis](#) 3 hrs.
- [CSC 414 - Software Design and Development](#) 3 hrs.
- [CSC 424 - Software Engineering II](#) 3 hrs.
- [CSS 405 - Advanced Internet: CGI Programming](#) 3 hrs.

Select 1 course:

- [MAT 114 - Calculus for the Arts and Sciences](#) 3 hrs. ♦*
- or
- [MAT 167 - Calculus I with Analytic Geometry](#) 3 hrs. ♦*

DEG 03. Electives

Choose approved technical electives as needed with advisor's approval. (See Hours to Degree below.)

Note:

♦ Calculus is required for this major. Students may enter MAT 167 directly if Math ACT sub score is 26 or higher. If Math ACT sub score is 24-25, MAT 103 must be completed. If Math ACT sub score is less than 24, MAT 101 and MAT 103 must be completed.

Hours to Degree

124 hours are needed to graduate with a BS in Information Technology with an emphasis in Developer. At least 50 percent of the hours applied to a degree at The University of Southern Mississippi must be earned from a senior college, and 30 of these hours must be in courses numbered 300 or above. The student must earn at least 21 of the last 30 hours of course work and at least 12 hours in the major area of study from Southern Miss. See [Residence Hour Requirements](#) for more information.



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